

Hazardous Materials Emergency Management, EPA and OSHA Enforcement and the 2002 Winter Olympics

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Abstract

The upcoming Winter Olympic Games in Salt Lake City are remarkable for a host of reasons. The Games include a substantive focus on the environment, including environment as a cornerstone of the Olympic effort. Furthermore, the Games' location in Salt Lake City places them in the midst of the largest population to be involved on the Winter Games. With venues scattered through the Wasatch Front and Back, the games offer a diversity of locations that are unlike any previous Olympic competitions.



Abstract (continued)

Several Olympic venues will use hazardous materials to provide ice surfaces (primarily ammonia refrigeration) and have developed hazardous materials emergency management strategy.

The bobsleigh/luge track at the Utah Olympic Park is covered by both OSHA's Process Safety Management and EPA's Risk Management standards. The URS team has provided support to the Salt Lake Organizing Committee for the 2002 Winter Games (SLOC) for both U.S. EPA Chemical Safety Audits and Utah OSH Process Safety Management compliance inspections.



Emergency Response and the Winter Sports Venues of Salt Lake City

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Presentation

- Discussion of 2002 Winter Olympic Venues and Challenges
- ER Planning and Integration for a Major Event
- The EPA CSA/Utah OSH and the Utah Olympic Park



2002 Winter Olympic Games

- The World's First "Green" Games
- Environment Joins Culture and Sport as equivalents
- Greening the venues:
 - Low impact
 - Ammonia refrigeration



The Venues

- Utah Olympic Park
- Utah Olympic Oval
- E-Center
- Ogden Ice Sheet
- Other skating venues



Utah Olympic Park

- Designated venue for the 2002 Winter Olympics sliding and jumping events



Bobsled/Luge Track



- Nearly 1 mile of ammonia refrigerated surface - state of the art refrigeration system



Central Refrigeration Plant



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Utah Olympic Oval



- Facility specialty built for Games
- Award-winning energy efficient design
- Ammonia refrigeration system

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Utah Olympic Oval



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Utah Olympic Oval



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E-Center, SLC



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Ogden Ice Sheet



Peaks Ice Arena, Provo



Emergency Response Planning
and Sports Venues

- Planning and day-to-day operations:
 - Training
 - Tourism
- Planning and World Cup Events
- Planning for the Olympic Games



What is the Magnitude of a Winter Games?

- U.S. National Championships (sliding):
 - 1,500 spectators
- World Cup Events (sliding):
 - 2,500 spectators
- Olympic Events (sliding):
 - 10,000 spectators



Everyday Planning

- Venues are little more than day-to-day businesses
- Plans are essentially similar to those required by any business with certain notable exceptions -
 - Coordination with local authorities



Coordination with Local Authorities at the UOP

- Park City Fire Department
- Utah Department of Emergency Management
- Utah Highway Patrol (HazMat Team)
- Utah Department of Environmental Quality



Games Time Plans in Place and Needed

- Evacuation
- Response to natural hazards emergencies
- Response to non-chemical terror
- Response to chemical threat

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Integrating Planning and Training for Games Time

- Intensive coordination with local authorities
- Education and outreach efforts for response personnel general unfamiliar with public events:
 - e.g. HazMat team familiar with transportation incidents
 - Fire Department familiar with domestic and business calls

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Training for UOP Personnel

- Ammonia specific HazMat Technician Level training
- Ammonia specific drills - train personnel on systems
- Tabletop exercises
- Full-scale exercises

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CSA and the Utah Olympic Park



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The EPA Chemical Safety Audit Program (CSA)

- CSA is part of EPA's broader Chemical Accident Prevention Program authorized under the Emergency Planning and Community Right-to-Know Act
- CSA evolved from the risk management provisions of the CAAA of 1990

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The CSA and OSHA

- EPA and OSHA's Memorandum of Understanding on PSM/RMP
- OSHA supplies technical support to CSA teams
- OSHA retains enforcement ability if invited to participate

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Why Me?

- CSA's requests can be extended to any facility with the possibility of an accidental release affecting an off-site "receptor" through the General Duty clause of the CAAA (Section 112(r)(1))



The Audit Experience

- Audit Team:
 - U.S. EPA:
 - Team leader
 - AARP Enrollee
 - START Contractor
 - Ammonia Refrigeration Specialist
 - Members of senior Region 8 Staff
 - Utah OSHA:
 - 2 compliance personnel
 - Compliance director
 - Director
 - Federal OSHA:
 - Three members of National Technical Team



Audit Duration

- Document review (1 day)
- Outside responder interviews, visits (1 day)
- On-site activities (1 day)
- Follow-up visits (More than 40 man-days)



Audit Outcome

- Separate reports from EPA and Utah OSHA
- Recommendations for improving code compliance, operating procedures, maintenance practices and emergency response plan
- Experience not yet over...



CSA Positives

- Focus on emergency response planning improves overall facility safety and highlights areas for improvement in coordination with local agencies
- Focus on operations improved facility operators focus on PSM and related issues



CSA Challenges

- Audit overwhelmed UOP personnel (2 full-time operators and 2 management personnel)
- Audit did not follow pre-determined protocol, nor was a protocol provided to SLOC prior to visit.
- Auditors tended to focus on specifics, not systemics



Preparing for a Regulatory Visit

- Determine and document compliance and enforcement intentions prior to visit
- Request written audit protocol and guidance documentation
- Provide detailed documentation well in advance
- Coordinate interview schedules and personnel needs in advance



Conclusions

- Venue compliance experience has lessons for all types of facilities:
 - Coordinate with all outside agencies
 - Clearly establish incident response activities
 - Ensure management attention to issues
- Prepare for regulatory audits and develop framework to ensure a fair assessment.


